30. The system of claim 29, said control object further comprising extensions wherein said control object is adapted to logically and physically pass a control signal to said device, and wherein said control object is adapted to send a message to one of an electronic controller and interface provided in said device.

REMARKS

Upon entry of the present amendment, claims 1-32 will remain pending. Claims 4, 14, 22, 27 and 30 will have been amended. Reconsideration of the Office Action of September 12, 2002 is respectfully requested.

The Examiner rejected claims 14 and 27 under 35 U.S.C. § 112, second paragraph, as being indefinite. The Examiner further objected to claims 4, 9, 22, 24 and 30 as containing informalities. Applicants have amended claims 4, 14, 22, 27 and 30 as noted by the Examiner. However, Applicants submit there are no informalities with regard to claims 9 and 24. The Examiner is invited to contact the undersigned to discuss the reasoning behind such objection to claims 9 and 24. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection under 35 U.S.C. ¶ 112, second paragraph, of claims 14 and 27 and the objection to claims 4, 9, 22, 24 and 30.

The Examiner rejected claims 1-4, 8, 11-14, 20-23 and 25-32 under 35 U.S.C. § 102(e) as being anticipated by Chambers et al. (U.S. Patent No. 5,959,536). The Examiner asserted that Chambers et al. teaches the subject matter of claims 1-4, 8, 11-14, 20-23 and 25-32. Applicants respectfully traverse.

Each of independent claims 1, 20 and 28 recite, *inter alia*, that the control objects accept and issue control messages to and from their respective devices, are active while their respective device is functioning, and maintain a list of all other registered control objects and their logical attributes (i.e., the information that the control objects maintain about their respective device). Applicants submit that Chambers et al. fail to teach control objects having at least this combination of features of the invention. In particular, none of the Class A, B, C or D devices are not controlled by control objects as recited in the claims of the instant invention. The Class A devices are not controlled by software objects at all. The Class B and C devices are controlled by a Class D device, and hence, do not have a respective control object. Class D devices, while maintaining a registry, do not maintain information regarding the logical attributes of the registered objects (see, col. 8, lines 26-27). Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection under 35 U.S.C. § 102(e).

The Examiner rejected claims 9, 10, 15-19 and 24 under 35 U.S.C. § 103(a) as being unpatentable over Chambers et al. in view of Perlman et al. (United States Patent No. 5,574,860). The Examiner asserted that Chambers et al. teaches all of the limitations of claims 9, 10, 15-19 and 24 with the exception of designating a first registered control object a manager object. In this regard, the Examiner asserted that Perlman et al. teaches designating a first registered control object a manager object, and that it would have been obvious to combine Chambers et al. with Perlman et al. to arrive at Applicant's claimed invention. Applicants respectfully traverse.

As noted above, Chambers et al. fail to teach "control objects" as recited in the claims of the instant invention. Again, the control objects have specifically recited characteristics that are not

taught or suggested by Chambers et al. While Perlman et al. teach operational nodes that elect a "designated node," these nodes are not control objects, as recited herein. The designated node is not necessarily a first registered node, as a "better qualified" node than a presently designated node may be designated (see, col. 2, lines 58-67). Thus, Perlman et al. fails to remedy the deficiencies of Chambers et al. As such, any proper combination of Chambers et al. and Perlman et al. would fail to yield Applicants' invention as recited in the claims. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection under 35 U.S.C. § 103(a).

The Examiner rejected claims 5-7 under 35 U.S.C. § 103(a) as being unpatentable over Chambers et al. in view of Shteyn (United States Patent No. 6,199,136). Applicants respectfully traverse. Without addressing the propriety of the Examiner's rejection of claims 5-7, Applicants note that claims 5-7 depend from claim 4, which depends from independent claim 1. For the reasons noted above, Applicants believe claim 1 is allowable over the prior art of record. As such, claims 5-7 are likewise allowable in view of the additional features claims 5-7 recite in combination with those of claims 1 and 4. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection under 35 U.S.C. § 103(a).

CONCLUSION

It is respectfully submitted that each and every claim pending in this application patentably defines over the prior art of record. For all the foregoing reasons, Applicant respectfully submits that the instant application is in condition for allowance. Reconsideration of the present Office Action and an early Notice of Allowance are respectfully requested.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "**Version with markings to show changes made.**"

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

Claims 4, 14, 22, 27 and 30 have been amended as follows:

4. The system of claim 1, wherein said software controllable devices each include an operating system, said operating system including application programming interfaces to retrieve data from, and write data to, said control object, and

wherein said control object ~~control object~~ is polymorphic such that said control object is adapted to take on the logical attributes and command and control capabilities of any of said devices.

14. The system of claim 1, wherein said respective one of said ~~physical~~ software controllable devices further comprises a display by which said respective one of said ~~physical~~ software controllable devices is controlled, and wherein said display is adapted to control others of said devices via said network and said control object.

22. The system of claim 21, said control objects further comprising extensions wherein said control objects are adapted to logically and physically pass a control signal to said devices, and wherein said control objects are adapted ~~so~~ to send a message to one of an electronic controller and interface provided in said devices.

27. The system of claim 20, wherein at least one of said ~~physical~~ software controllable devices further comprises a display by which said at least one of said ~~physical~~ software controllable

devices is controlled, and wherein said display is adapted to control others of said devices via said network and said control objects.

30. The system of claim 29, said control object further comprising extensions wherein said control object is adapted to logically and physically pass a control signal to said device, and wherein said control object is adapted ~~so~~ to send a message to one of an electronic controller and interface provided in said device.